

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**STATE ORIGIN  
AIR QUALITY PERMIT  
Issued under 401 KAR 52:040**

**Permittee Name:** Givaudan Flavors Corporation  
**Mailing Address:** 9500 Sam Neace Road  
Florence, Kentucky 41042

**Source Name:** Givaudan Flavors Corporation  
**Mailing Address:** Same as above  
**Source Location:** 9500 Sam Neace Road  
Florence, Kentucky 41042

**Source ID #:** 021-015-00150  
**Agency Interest #:** 4590

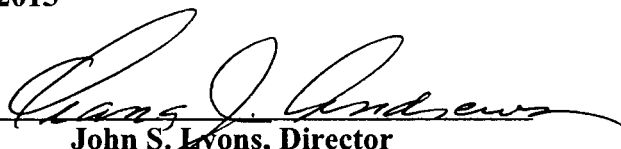
**Regional Office** Florence Regional Office  
8020 Veterans Memorial Drive, Ste 110  
Florence, KY 41042  
(859) 525-4157

**County:** Boone

**Permit Number:** S-05-121  
**Activity ID:** APE20050001  
**Permit Type:** Minor Source Construction/Operation

**Application  
Complete Date:** June 28, 2005

**Issuance Date:** July 14, 2005  
**Revision Date:** N/A  
**Expiration Date:** July 14, 2015

  
**John S. Lyons, Director  
Division for Air Quality**

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agencies.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****01(P01) Filtermat****One (1) Filtermat Spray/Belt Dryer: Batch Process****Description:**

Proposed Construction: March 2006

Maximum operating rate: 0.5 tons material output/hr  
2,920 tons material output/yrControl Equipment: Regenerative Thermal Oxidizer (RTO) for Odor only and Scrubber/  
Demister and RTO pre-filter for PM10; exhaust through Stack S01**Specific Control Equipment:**

(See Table)

Equipment ID	Description	Controls
<b>Givaudan Process-Stack S01</b>		
P01 Filtermat	1 New Filtermat Spray/Belt Dryer	RTO for odor control only; Scrubber/demister C01 and RTO Pre-filter C02 to control PM10

**APPLICABLE REGULATIONS:**401 KAR 59:010 *New Process Operations* constructed after July 2, 1975.401 KAR 55:055 *General Compliance Requirements*, as defined in Section C, General Conditions.**1. Operating Limitations:**

- a. Pursuant to 401 KAR 50:055, Section 1(5), at all times, including periods of start-up, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
- b. Pursuant to 401 KAR 50:055, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation in accordance with the manufacture's specifications and/or standard operating procedures at any time an affected facility for which the equipment and measures are designed is operated.

***Compliance Demonstration Method:***

Refer to Section B.4 a.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

- a. Mass emissions limit pursuant to 401 KAR 59:010, Section 3(2), maximum emissions of particulate matter shall not exceed 2.34 lbs/hr.
- b. Opacity Limit Pursuant to Regulation 401 KAR 59:010, Section 3(1)(a): Visible emissions shall not equal or exceed 20% opacity on a 6-minute average basis.

***Compliance Demonstration Method:***

- a. For compliance with the particulate matter emission limit, compliance is demonstrated during normal operation of the wet scrubber/demister.
- b. For compliance with the opacity limitations, refer to the monitoring requirement and recordkeeping requirement under Sections B.4. and 5.

**3. Testing Requirements:**

- a. Pursuant to 401 KAR 50:045, Section 1, the cabinet may require the owner or operator of any affected facility to sample emissions in accordance with such methods, as the cabinet shall prescribe.
- b. Pursuant to 401 KAR 59:005, Section 2(1), within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility and at such other times as may be required by the cabinet, the owner or operator of any affected facility shall conduct performance test(s) according to Subsection 3.a. and furnish the cabinet a written report of the results of such performance test(s).

**4. Specific Monitoring Requirements:**

The permittee shall monitor the following parameters:

- a. Water flow rate readings in gallons per minute (gals/minute) for the following control devices taken once daily and recorded when affected equipment is in operation.

Device *	Emission Unit/Point
C01 Wet Scrubber/Demister	P01/EP 01

- b. Opacity Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from the respective stack on a monthly basis and maintain a log of the observation. If visible emissions are seen from a stack, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Recordkeeping Requirements:**

- a. Daily record of water flow rate in gpm of the above mentioned wet scrubber/demister, noting periods where no water flow rate readings were taken due to affected equipment not in operation.
- b. During all periods of malfunction of the wet scrubber/demister or any of the emission units associated with each control device are in operation, a daily (calendar day) log of the following information shall be kept:
  - i. Whether any air emissions were visible.  
If visible emissions are observed, the permittee shall record the following:
  - ii. Whether the visible emissions were normal for the process.
  - iii. The color of the emissions and whether the emissions were light or heavy.
  - iv. The cause of the abnormal visible emissions.
  - v. Any corrective actions taken.
- c. All routine and non-routine maintenance activities performed on the wet scrubber/demister.
- d. Maintain a record of respective pressure drops.

**6. Specific Reporting Requirements: None**

**7. Specific Control Equipment Operating Conditions: None**

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **02(P02) Minor Source Ingredients**

#### **Nine (9) Supersack Minor Ingredient Bulk Unloaders: Batch Process**

##### **Description:**

Proposed Construction: October 2005

Maximum operating rate: 0.53 tons material output/hr  
3,860 tons material output/yr

Control Equipment: Rotoclone to control PM10; exhaust through Stack S02

### **03(P03) Three (3) Mixer/Blenders: Batch Process**

##### **Description:**

Proposed Construction: October 2005

Maximum operating rate: 2.65 tons material output/hr  
19,310 tons material output/yr

Control Equipment: Rotoclone to control PM10; exhaust through Stack S02

### **04(P04) 3 New Post Blend Fillers: Batch Process**

##### **Description:**

Proposed Construction: October 2005

Maximum operating rate: 2.65 tons material output/hr  
19,310 tons material output/yr

Control Equipment: Rotoclone to control PM10; exhaust through Stack S02

### **05(P05) 2 New Packaging Lines: Batch Process**

##### **Description:**

Proposed Construction: October 2005

Maximum operating rate: 2.65 tons material output/hr  
19,310 tons material output/yr

Control Equipment: Rotoclone to control PM10; exhaust through Stack S02

#### **Specific Control Equipment:**

(See Table)

<b>Givaudan Process-Stack S02</b>		
P02 Minor Source Ingredients	9 New Supersack Bulk Unloaders	Rotoclone C03 to control PM10
P03 Mixer/Blenders	3 New Mixer/Blenders	Rotoclone C04 to control PM10
P04 Post blend fillers	3 New Post Blend Fillers	Rotoclone C05 to control PM10
P05 Packaging	2 New Packaging Lines	Rotoclone C06 to control PM10

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **APPLICABLE REGULATIONS:**

401 KAR 59:010 *New Process Operations* constructed after July 2, 1975.

401 KAR 55:055 *General Compliance Requirements*, as defined in Section C, General Conditions.

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. Pursuant to the mass emission limit of 401 KAR 59:010, Section 3(2); per the respective affected facilities emissions of particulate shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate.  
For process rates up to 60,000 lbs/hr  $E = 3.59 P^{0.62}$   
For the equation: E = rate of particulate emissions in lb(s)/hr, and  
P = process weight rate in tons/hr.
- b. Opacity Limit Pursuant to Regulation 401 KAR 59:010, Section 3(1)(a): Visible emissions shall not equal or exceed 20% opacity on a 6-minute average basis.

***Compliance Demonstration Method:***

- a. Compliance is demonstrated during normal operation of the rotoclones on P02 through P05.
- b. For compliance with the opacity limitations, refer to the monitoring requirement and recordkeeping requirement under Section B.5.b.

3. **Testing Requirements:**

- a. Pursuant to 401 KAR 50:045, Section 1, the cabinet may require the owner or operator of any affected facility to sample emissions in accordance with such methods, as the cabinet shall prescribe.
- b. Pursuant to 401 KAR 59:005, Section 2(1), within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility and at such other times as may be required by the cabinet, the owner or operator of any affected facility shall conduct performance test(s) according to Subsection 3.a. and furnish the cabinet a written report of the results of such performance test(s).

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Specific Monitoring Requirements:**

The permittee shall monitor the following parameter(s):

<b>Device *</b>	<b>Emission Unit/Point</b>
C03 Rotoclone	P02/EP 02
C04 Rotoclone	P03/EP02
C05 Rotoclone	P04/EP02
C06 Rotoclone	P05/EP02

Opacity Monitoring: The permittee shall perform a qualitative visible observation of the opacity of emissions from the respective stack on a monthly basis and maintain a log of the observation. If visible emissions are seen from a stack, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs.

**5. Specific Recordkeeping Requirements:**

- a. Daily record of water flow rate in gpm of the above mentioned rotoclones, noting periods where no water flow rate readings were taken due to affected equipment not in operation.
- b. During all periods of malfunction of the rotoclones if any of the emission units associated with each control device are in operation, a daily (calendar day) log of the following information shall be kept:
  - i. Whether any air emissions were visible.  
If visible emissions are observed, the permittee shall record the following:
  - ii. Whether the visible emissions were normal for the process.
  - iii. The color of the emissions and whether the emissions were light or heavy.
  - iv. The cause of the abnormal visible emissions.
  - v. Any corrective actions taken.
- c. All routine and non-routine maintenance activities performed on the wet scrubber/demister or rotoclones.
- d. Maintain a record of respective pressure drops.

**6. Specific Reporting Requirements: None****7. Specific Control Equipment Operating Conditions: None**



## **SECTION C - GENERAL CONDITIONS**

### **A. Administrative Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:040, Section 15].
3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Material incorporated by reference by 401 KAR 52:040, Section 1a, 11].
4. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [Material incorporated by reference by 401 KAR 52:040, Section 1a, 4,5].
5. This permit does not convey property rights or exclusive privileges [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].

### **B. Recordkeeping Requirements**

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f)].
2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

### **C. Reporting Requirements**

1. a. In accordance with the provisions of 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- b. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1. a. above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report [Material incorporated by reference by 401 KAR 52:040, Section 5, 3].
2. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the permit [Material incorporated by reference by 401 KAR 52:040, Section 1a, 6].
3. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

The summary reports are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

### **D. Inspections**

1. In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.

## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

- b. To access and copy any records required by the permit.
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
- d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

### **E. Emergencies/Enforcement Provisions**

- 1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Material incorporated by reference by 401 KAR 52:040, Section 1a, 3].
- 2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].
- 4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

### **F. Compliance**

- 1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
  - a. Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are

## SECTION C - GENERAL CONDITIONS (CONTINUED)

- designed is operated, except as provided by 401 KAR 50:055, Section 1.
- b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and nonroutine maintenance performed on each control device.
  - c. A log of the monthly raw material consumption and monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program, spread sheets, calculations or performance tests as may be specified by the Division [401 KAR 50:055, Section 2].
2. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
- a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Florence Regional Office 8020 Veterans Memorial Drive, Ste 110 Florence, KY 41042	Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601-1403
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3. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:
- (a) Applicable requirements that are included and specifically identified in this permit; or
  - (b) Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].

**SECTION D - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee shall comply with the applicable regulation and any level of periodic monitoring specified below.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Boiler 1 (old)	401 KAR 59:015 (PTE = 3.50 tons/yr NO <sub>x</sub> )
2. Boiler 2 (old)	401 KAR 59:015 (PTE = 3.50 tons/yr NO <sub>x</sub> )
3. Boiler 3(New)	401 KAR 59:015 (PTE = 1.12 tons/yr NO <sub>x</sub> )
4. New Filtermat Combustion	401 KAR 59:015 (PTE = 2.96 tons/yr NO <sub>x</sub> )
5. Misc. Combustion (old)	None (PTE = 0.17 tons/yr NO <sub>x</sub> )
6. Old Mixers/Blenders	401 KAR 59:010 (PTE = 4.63 tons/yr PM <sub>10</sub> )
7. New Reactors	401 KAR 59:010 (PTE = 1.64 tons/yr PM <sub>10</sub> )
8. New Micro Ingredient Drums	401 KAR 59:010 (PTE = 0.01 tons/yr PM <sub>10</sub> )
9. New salt Unloading Silo	401 KAR 59:010 (PTE = 0.0 tons/yr PM <sub>10</sub> )
10. New Maltodextrin Unloading Silo	401 KAR 59:010 (PTE = 0.0 tons/yr PM <sub>10</sub> )
11. Old Reactors/Kettles	401 KAR 59:010 (PTE = 0.32 tons/yr VOC)
12. Wastewater Pretreatment Plant	401 KAR 53:010 Appendix A (Odor) Negligible VOC emissions

## PERMIT FACT SHEET

<b>PERMIT REVIEWER:</b>	<b>James A. Neal</b>
<b>DATE:</b>	<b>June 6, 2005</b>
<b>SOURCE NAME:</b>	<b>Givaudan Flavor Corporation</b>
<b>SOURCE I.D. #:</b>	<b>021-015-00150</b>
<b>SOURCE A.I #:</b>	<b>4590</b>
<b>SUBJECT:</b>	<b>Minor Source, Construction/Operation</b>
<b>ACTIVITY #:</b>	<b>APE20050001</b>
<b>PERMIT NUMBER:</b>	<b>S-05-121</b>

### DESCRIPTION:

Givaudan Flavor Corporation manufactures meat and other type flavors for the food industry. Givaudan's Florence, Kentucky operation is similar to the processes now in operation at their Cincinnati facility.

To develop and process the flavors, the listed processes will be constructed. Please refer to Section D for the Insignificant activities related to the issuance of this construction/operation permit.

### 01(P01) Filtermat Spray/Belt Dryer

#### Description:

The Filtermat spray dryer will dry most sticky, hygroscopic, thermoplastic and slowly crystallizing products into free flowing powders. The Filtermat spray dryer combines a co-current nozzle tower dryer with a built-in conveyor belt. The residence time for the powder as it travels through different zones is several minutes, offering sufficient time to complete drying while maintaining the required powder temperatures.

The Filtermat is designed as a two stage dryer. In the first stage, the liquid concentrate is pumped to a high-pressure nozzle assembly and sprayed into the drying chamber over the conveyor belt, co-current to the hot air introduced through the air disperser. This combined operation in the drying chamber directs the particles onto the conveyor belt to form a layer of partly dried agglomerated powder. In the second stage, the semi-dried powder layer travels through the secondary drying and cooling zones after which it falls off the belt to be milled/sieved prior to bagging. The drying air is exhausted through the powder layer and the belt to a cyclone separator for separating the powder fines from the exhaust air. The exhaust air is then processed through a wet scrubber/demister before exhausting it to a regenerative thermal oxidizer for odor control.

## **02(P02) Minor Source Ingredients - Nine (9) Supersack Minor Ingredient Bulk Unloaders**

### **Description:**

Nine bulk bag unloading stations will receive 2,000 bulk bags for two maltodextrins, hydrolyzed dextrose, sucrose, two HPP powders, chicken powders and two pre-blends (these systems are adaptable to handle any ingredients). The stations are equipped with pendant operated electric hoist and trolleys, air operated bag massagers, active feed device, dust collection piping and hood, material cut-off valve and deep reach magnetic trap.

## **03(P03) Three (3) Mixer/Blenders**

### **Description:**

Bulk ingredients are pneumatically conveyed from the silos to the selected scale hopper. Product and air is separated by a cyclone and conveying air will be vented to the central dust collection system. Each bulk scale is equipped with an explosion vent and vent duct penetrating the building that can be cleaned and inspected during the cleaning process. During bulk ingredient scaling, the operator will position and prepare to dump minors and micro ingredients with the drum dumper and/or bag dumping station. As soon as the mixer charge permissive is established, the bulk scale discharge cycle will start. At this time the operator will commence loading of the mixer with ingredient drums and bags (the system will allow the operator to dump drums and bags simultaneously through drum dumping and bag dumping stations). Subsequently, any flavor oils will be introduced into the pressurized pot, or fats introduced by drum.

## **04(P04) Three (3) Post Blend Fillers**

### **Description:**

After mixing, the operator will initiate the mixer discharge cycle after empty containers are placed on the floor scales. Containers are moved by forklift to the packaging line container dumping area.

## **05(P05) Two (2) Packaging Lines**

### **Description:**

After containers are transferred to the packing surge bin area, the operator loads the appropriate container onto one of the two container dumpers. Containers are dumped into one of the two surge bins when a low level permissive indicates there is room for product. The surge bin capacity holds the contents of one container plus sufficient surge to prevent the packing machine from being starved during loading of the surge bin.

### **Continuous Batch Process**

The above operations are each a continuous batch process.

**COMMENTS:**

The source met with Division personnel on May 27, 2005. At that time, the construction application was reviewed and found deficient. A revised application was received June 7, 2005. Construction will begin in 2006. The construction/operation permit application was logged complete June 28, 2005.

**Maximum hourly design rate:** Refer to application and pollutants of concern (POC) table

**Type of control and efficiency:**

Particulate emissions will be controlled by wet scrubber with odors, volatile organic compounds (VOC), being controlled by a Regenerative Thermal Oxidizer (RTO) followed by a scrubber/demister and RTO pre-filter for control of particulate matter less than 10 microns (PM10). The RTO emissions will exhaust through Stack S01. Rotoclones control particulate from all other emission points, which will be vented through a common stack, S02. The POC table lists the control efficiency for the respective emission points.

**Emission factors and their source:** AP-42, engineering evaluation, material balance, vendor, and consultant

**Calculations:** Refer to POC table

**Applicable regulation(s) and calculated allowables (reference POC table):**

401 KAR 52:040 *State Origin Permits*, as defined in Section C, General Conditions. Since uncontrolled PM emissions are less than 100 TPY, this facility is classified as a true minor source.

401 KAR 59:010 *New Process Operations* constructed after July 2, 1975.

401 KAR 59:015 *New Indirect Heat Exchangers* is applicable to the indirect heat exchangers listed in section D as insignificant emission units.

401 KAR 55:055 *General Compliance Requirements*, as defined in Section C, General Conditions.

401 KAR 53:010 *Ambient Air Quality*, Appendix A (Odor), is applicable to the facility in general.

The following regulations were reviewed and determined not to apply for the reasons stated.

Since uncontrolled PM emissions are less than 250 TPY, Regulation 401 KAR 51:017, Prevention of Significant Deterioration (PSD) will not be applicable. The source is not subject to any 40 CFR 63 subparts, since HAP emissions are only from natural gas combustion and are minimal. No MACT regulations exist for the processes identified in the permit application.

Federal regulation 40 CFR 60, Subpart Kb is not applicable to the storage tanks identified in Section D as insignificant emission units due to material storage.